Attachment A

California Environmental Quality Act Findings and Mitigation Monitoring and Reporting Plan for the Pit 3, 4, and 5 Hydroelectric Project

WATER RESOURCES

Impact 1: Impacts from the installation of a flow gaging system adjacent to Pit 3 bypass reach

Pacific Gas & Electric Company (PG&E) proposes various measures that pertain to flow releases and the water surface elevation of Project reservoirs that include: (1) minimum flow recommendations in all three bypassed reaches with provisions for flow shaping; (2) establishment and implementation of appropriate up and down ramping rates; (3) the release of dry-year freshet flows in a controlled manner; (4) implementation of measures that would minimize, to the extent feasible, the effects of uncontrolled high-flow releases to the bypassed reaches; and (5) restrictions to the water surface elevations at Lake Britton. The State Water Resources Control Board (State Water Board) must be able to verify compliance with the flow and water-level restrictions. No gage currently exists to provide a direct measurement of the flows in the Pit 3 Bypass Reach. Installation of a flow gaging station adjacent to the bypassed reach would result in environmental consequences associated with the construction of the gage station itself, the associated access road, and provision of electricity to operate the gaging station instrumentation (e.g., potential erosion and sedimentation, destabilization of existing steep slopes, disturbance of aquatic habitat, disturbances to bald eagles, potential degradation of the local visual quality, and potential disturbance of cultural sites). This impact is considered significant.

Implementation of Mitigation Measure 1 will reduce this impact to a less than significant level.

Mitigation Measure 1: Streamflow and Reservoir Level Monitoring Plan

PG&E shall develop a streamflow and reservoir level monitoring plan that includes provisions to measure streamflows required under conditions of the water quality certification. In the Pit 3 Reach this would be accomplished by using the sum of spillway flow calculated from hourly reservoir elevation to account for spill volume and the hourly mean release from a calibrated release valve at the dam or by other means acceptable to the U.S. Geological Survey (USGS); in the Pit 4 Reach this would be accomplished at USGS gage No. 11362500; and in the Pit 5 Reach this would be accomplished at USGS gage No. 11363000. The plan shall be developed within 1 year of license issuance, in consultation with the U.S. Forest Service (FS), U.S. Fish and Wildlife Service (FWS), California Department of Fish and Game (CDFG), State Water Board, and USGS and submitted for review and approval of the Chief of the Division. The Plan shall include a provision for PG&E to provide streamflow information to the public beginning no later than 1 year from license issuance, in accordance with the provisions in the section of the Pit River Collaborative Team (PRCT) agreement entitled

Streamflow Information. The plan shall include the following components and considerations:

A. A description of the existing flow and any existing water surface elevation monitoring devices, including location and type of instrumentation;
B. Installation and calibration of a flow measurement device in the Pit 3 Reach (either a device in the release valve at the Pit 3 Dam, or a gage in the Pit 3 Reach) which can accurately (i.e. meets USGS standards) measure compliance with the flow regime specified in the license order. PG&E shall submit to the Chief of the Division for review and approval a plan for the installation of the selected flow measurement device, including specific measures that will be used to protect water quality;
C. The proposed frequency of data downloads, how the data would be accessed during the term of the new license, and the proposed technique and frequency of calibration (for those existing flow gaging stations that are operated in cooperation with USGS, we anticipate that future calibration would be similar to current calibration procedures);
D. A detailed description of any structural modifications that would be necessary to accommodate the flow regime (and its measurement) specified in the new license, including design drawings, conceptual cost estimates, and schedule for implementation of the proposed modifications;
E. Proposed interim measures to comply with required flow releases until structural modifications have been completed;
F. Identification of the entities responsible for installing, maintaining, and ensuring the continued accuracy of the flow and water surface elevation monitoring devices; and
G. Reporting frequencies to the State Water Board, appropriate agencies and Federal Energy Regulatory Commission (FERC).

Impact 2: PG&E may need to either reduce generation flows, or exercise its senior water rights to meet instream minimum flows
The exercise of PG&E's senior water rights could have an economic effect on junior water right holders upstream of the Project.

While economic and social effects are not considered environmental effects under CEQA, to the extent that this impact could lead to a physical change in the environment (by junior water right holders implementing water supply alternatives), the State Water Board finds that this impact is avoided by the implementation of PG&E's commitment. As a result of negotiations with upstream water users, PG&E has withdrawn its water right complaints related to the existing operation of the Pit 3, 4, 5 Project that it had filed with the State Water Board. PG&E also developed a "commitment" in consultation with upstream water rights holders that provides assurance that PG&E would not initiate new water right complaints for specified uses of water consistent with state law. This commitment becomes effective after issuance of a new license (and resolution of any associated appeals) with instream flow and other operating requirements that are consistent with the PRCT agreement.

This finding and the commitment itself shall in no way prevent the State Water Board from taking any appropriate water right enforcement action on its own motion or on a motion from a party other than PG&E.

Impact 3: Proposed flow regimes could influence water temperature and impact the habitat for temperature sensitive aquatic biota
Changes in flow can impact water temperature. Certain aquatic biota are sensitive to water temperature and may be affected by changes associated with change in flow. This impact is considered significant.

Implementation of Mitigation Measures 2, 3, 7, and 11 will reduce this impact to a less than significant level.

Mitigation Measure 2: Water Temperature and Water Quality Monitoring Plan
PG&E shall develop and implement a water temperature and water quality monitoring plan, including monitoring during months when temperatures could be limiting to aquatic biota, which for most species is from June through September. The Plan should help define parameters that would optimize foothill yellow-legged frog reproduction, which typically occurs during the spring, and would serve as a basis for establishing the timing of spring freshet flow releases. Therefore, during the spring, PG&E shall monitor temperature at known or potential foothill yellow-legged frog habitat locations. Taking spot dissolved oxygen (DO) measurement and periodic temperature and DO profiles in Lake Britton near the Pit 3 Dam during high temperature low flow conditions (which typically occur during July and August), along with monitoring water temperature in the river reaches, will provide a basis for documenting that Project operations comply with water quality objectives. This plan shall be developed in consultation with the FS, FWS, CDFG, U.S. Environmental Protection Agency (EPA), and State Water Board, and submitted to the Deputy Director of the Division of Water Rights (Deputy Director) for approval. The approved plan must be submitted to FERC within one year of license issuance. The plan shall include the following:

A. The location of stations in each reach at which water temperature will be monitored;
B. The time frame during which water temperature will be monitored at each station;
C. The type of instrumentation, frequency of data collection, and calibration procedures that will be used to monitor temperature and DO;
D. Temperature conditions that will trigger spot DO measurements at specific stations;
E. Potential Project operational procedures that could be implemented to maintain Project waters at or below 20 degrees C (68 degrees F) and identification of circumstances that would trigger implementation of those procedures. If monitoring shows water temperature exceeding 20 degrees C, it may be possible to temporarily modify Project operations to maintain cooler water in the affected reach;

F. A schedule for installation of temperature monitoring equipment (to be completed no later than six months after submission of the plan to FERC); and
G. Procedures to report monitoring results to the State Water Board, other resource agencies, and FERC.

Mitigation Measure 3: Fish and Invertebrate Monitoring Plan
PG&E shall develop and implement a fish and invertebrate monitoring plan that is based on the methods used in surveys conducted during the relicensing effort and the current Biological Compliance Monitoring Plan (BCMP), including angler surveys, reservoir fish surveys, river reach surveys, macroinvertebrate surveys, and aquatic mollusk surveys. This plan shall be developed within six months of license issuance, and for surveys in years 1 through 4 and in years 8, 12, 16, 20, and 24 (unless an alternative monitoring schedule is approved by Deputy Director), in consultation with the State Water Board, FS, CDFG, FWS, and the Tribe, at a minimum, and submitted to the Deputy Director for review and approval. The plan should be coordinated with the BCMP (Mitigation Measure 11), any gravel augmentation, and the collection of baseline data for potential recreation streamflow releases to the Pit 5 Reach (Mitigation Measure 8).

Impact 4: Project operations, including expanded recreational use, could increase turbidity and suspended solids due to erosion and sedimentation
Operation of the Project, along with development of additional recreational uses has the potential to impact water quality from increased erosion and sedimentation. This impact is considered significant.

Implementation of Mitigation Measures 4, 11, and 12 will reduce this impact to a less than significant level.

Mitigation Measure 4: Erosion and Sedimentation Control Plan
PG&E shall develop and implement an Erosion and Sedimentation Control Plan that is coordinated with the spoils pile management plan, recreation management and road management plans, and the Historic Properties Management Plan. For Lake Britton, this plan shall include: 1) periodic monitoring of the shoreline to identify actively eroding sites, assessing whether problems at identified sites are Project-related and if stabilization measures are warranted, 2) if warranted, provisions for designing and implementing shoreline stabilization in consultation with Deputy Director and or Executive Officer of the Central Valley Regional Water Quality Control Board, and 3) coordination of this component of the plan with the monitoring requirements for bank swallows under Mitigation Measure 11(B). The plan also shall specify protocols for addressing emergency erosion and sedimentation control measures, both for immediate short-term stabilization and, if necessary, permanent long-term measures to replace any temporary stabilization measures that may have been implemented. The plan should include protocols for notification of the FS, State Water Board, and FERC in the event that emergency erosion and sedimentation control measures are needed. The plan shall be developed within one year of license issuance in consultation with the Tribe, CDFG, FWS, State Water Board, and, as appropriate, the FS and submitted to the Deputy Director for approval. Erosion control measures must ensure that existing and

future erosion sites are identified and stabilized, and monitored. The Erosion and Sediment Control Plan shall incorporate the following measures:

A. Signage that encourages recreationists to stay on marked trails and obey designated boating speed limits
B. Procedures for detecting erosion sites
C. Procedures for stabilizing and monitoring erosion sites
D. Requirements for obtaining a General Permit for Discharges of Storm Water Associated with Construction Activity, including the development of a Storm Water Pollution Prevention Plan

Impact 5: Spoil piles 4D and Miners Creek could impact water quality from excessive erosion, leaching of hazardous materials buried in the piles, and non-native materials in spoil piles
Spoil pile 4D may cause an impact to the river channel and adjacent embankments causing excessive erosion and bank failure. Ongoing erosion is expected from the Miners Creek spoil pile. This impact is considered significant.

Implementation of Mitigation Measure 5 will reduce this impact to a less than significant level.

Mitigation Measure 5: Spoil Pile Management Plan
PG&E shall develop, within one year of license issuance, a single spoil pile management plan, in consultation with the FWS, CDFG, State Water Board, the Tribe, and, as appropriate, the FS, that contains provisions for slope stabilization, water quality protection, and revegetation. The plan shall be submitted to the Deputy Director and the Executive Officer of the Central Valley Regional Water Quality Control Board for review and approval. The plan shall: (a) include proposed remedial measures for the Miners Creek spoil pile, including the measures recommended by PG&E's consultant to control surface water runoff and protection of the toe from high flows in Miners Creek, as appropriate; (b) specify management and maintenance measures for all spoil piles created during Project construction; (c) address whether or not stabilization measures are warranted at the erosion site across the Pit River from spoil pile 4D; and (d) address the measures specified by the FS in its final 4(e) condition No. 20.a as follows:

General Measures:

- Stabilization/erosion control (using only certified weed- free straw)
- Revegetation
- Noxious weed management
- Foreign material treatment, including removal of visible non-native materials
- Monitoring of water quality (as per pre- licensing study protocol) and adherence to best management practices (BMPs)
- Consideration of visual quality
- Utilization of material (especially Pit 4 valve house site #4P)

- Other measures (i.e. recreational overlook improvements at Pit 4 Dam site #4D dispersed camping at the Adit pile #4A, road closure #4D)

Specific measures for spoil pile site #4P (at Pit 4 powerhouse) management:

- Develop a stabilization/rehabilitation plan for the site incorporating future placement of road spoils from Project roads, site leveling, slope revegetation, and other erosion prevention measures.
- Show the current site (after above work considered) and calculations showing the amount of material the site could hold for future spoils placement.
- Include a final pit plan including reclamation that shall also be submitted to Shasta County for compliance with Surface Mining and Reclamation Act (SMARA) regulations.
- Additional visual and safety mitigations may be necessary if this site is additionally used as a vista point for the public.
- The plan shall include the requirement to obtain a General Permit for Discharges of Storm Water Associated with Construction Activity from the Central Valley Regional Water Quality Control Board and Clean Water Act section 404 and 401 permits if necessary.

Impact 6: Dredging
Dredging activities, if needed during the term of the license, may cause sedimentation and downstream transport of fine-grained sediment that may be re-suspended at the dredging site. This impact is considered significant.

Implementation of Mitigation Measure 6 will reduce this impact to a less than significant level.

Mitigation Measure 6: Dredging Plan
PG&E shall develop a dredging plan that would apply should dredging in Project waters be needed during the term of a new license. The plan shall be developed and approved by the Deputy Director prior to conducting any dredging operation in Project waters, in consultation with the FWS, State Water Board, CDFG, U.S. Army Corps of Engineers (Corps), EPA, and, if the operation would affect National Forest System Lands, the FS, that includes the following: (a) a description of the need for the proposed dredging; (b) the selected method of dredging, and alternative methods considered; (c) a figure showing the areal extent of the dredging; (d) the estimated volume to be dredged; (e) a description of the substrate to be dredged; (f) a figure showing the proposed dredge spoil disposal site, with a description of measures to prevent erosion and sedimentation; and (g) a schedule for dredging, dredge disposal, and dredge spoil pile stabilization. PG&E shall implement BMPs to control sedimentation and downstream transport of fine-grained sediment that may be resuspended at the dredging site. Dredge spoil shall be disposed of in a manner that minimizes the potential for reintroduction of sediment. PG&E shall select an appropriate disposal site and implement spoil pile stabilization and restoration measures prior to the initiation of dredging. This water quality certification does not allow for dredging. When dredging is required, PG&E must obtain water quality certification, in addition to approval from the U.S. Army Corps of Engineers.

Impact 7: The spring freshet (flushing) flow in dry years may reduce encroachment of riparian vegetation, which could reduce cover, increase solar warming, reduce nutrient inputs, and reduce habitat for some species of invertebrates and native fish
The purpose of the freshet flow releases is to simulate a natural spill event in order to cleans the river substrate of sediments and organic debris, and move, sort and redistribute spawning gravels for fish and other aquatic organisms. In addition, the freshet flows are intended to recharge the riparian water table prior to seed germination and the plant-growing season, and to assist in reducing vegetation encroachment into the stream channel. The Freshet Flow Release Plan contains defined criteria for when freshet flow release would be provided. Any unacceptable increase in water temperature is addressed adequately in the Water Temperature Monitoring Plan (Mitigation Measure 2). This impact is considered significant.

Implementation of Mitigation Measure 2 will reduce this impact to less than significant.

Impact 8: Impacts of increased out of season spill events
An increase in the frequency of out of season spill events from Lake Britton could adversely affect algae beds, aquatic macroinvertebrates, mollusks, fish, and native amphibians through scouring, displacement and stranding. This impact is considered significant.

Implementation of Mitigation Measure 7 will reduce this impact to less than significant.

Mitigation Measure 7: Biological Monitoring and Adaptive Management Plan
PG&E shall develop a biological monitoring and adaptive management plan within one year of license issuance, in consultation with the FS, CDFG, FWS, State Water Board, and the Tribe, at a minimum, that establishes the framework for evaluating the effects of minimum instream flows, reservoir level and operations protocols, and freshet flows, on fish and wildlife, including defining the resource goals and objectives that are expected to be achieved under the conditions of a new license. The plan shall also define the process that would be used to determine whether: (1) measures result in any unanticipated significant impacts, and (2) if there is a need to adjust measures or implement new measures. The plan shall also define consultation procedures that will be taken prior to undertaking any actions that could affect FS sensitive species or their habitat, to determine whether preparation of a Biological Evaluation would be necessary (see Mitigation Measure 11). The plan shall be revised, as needed, every four years and filed with the Deputy Director, including a summary of monitoring results and description of any changes in water quality certification conditions that are proposed, and the basis for the changes. The State Water Board may, in its discretion and after notice and opportunity for hearing, amend the certification condition as appropriate.

Impact 9: Impact of Recreational Release on Aquatic Biota

Recreational releases during August and September could adversely affect aquatic biota, including trout populations, by scouring algae and invertebrates from the stream channel. Implementation of the whitewater boating flow releases in the Pit 5 Reach during the summer would likely affect the western pond turtle, since both hatchlings and adults rely on aquatic insect larvae, crustaceans, and annelids that could be flushed out of the system during high summer flows. Turtles may also rely on plant and animal detritus that is abundant on filamentous algae to supplement their diet. FYLF has not been found in the Pit 5 Reach during recent surveys. The proposed measure limits whitewater flow releases to the Pit 5 Reach and restricts the timing (2 weekends per year in August and September) and magnitude to reduce the impacts of the event on FLYF and western pond turtle. Recreational flow releases in August and September have the potential to adversely influence aquatic biota. This impact is considered significant.

Implementation of Mitigation Measures 7 and 8 will reduce this impact to less than significant.

Mitigation Measure 8: Recreation Streamflow Release Plan
PG&E shall develop a plan within six months of license issuance for providing annual recreation streamflow releases consistent with the water quality certification condition eight in the Pit 5 Reach suitable for whitewater boating, in consultation with the State Water Board, CDFG, FWS, NPS, CDPR, the Tribe, and American Whitewater Association (AWA), at a minimum. The plan shall provide details on the collection of up to five years of ecological monitoring data, specify details of a recreation streamflow release schedule, provide for environmental and boater-use monitoring during actual releases, and describe an adaptive management program that will provide for potential adjustments to the number of releases based on the results of the monitoring. The plan shall specify a decision point, where the results of baseline monitoring will be assessed by the consulted parties and a final recommendation, with the basis for the recommendation, made to the Deputy Director regarding whether or not scheduled recreation streamflow releases should be implemented. If scheduled releases are recommended, specific measures that will be implemented during the releases for the protection of sensitive resources, river users (e.g., swimmers and anglers), and the safety of boaters shall be submitted to the Deputy Director for review and approval. Prior to making a decision to implement scheduled streamflow releases, sufficient baseline data must be provided to the Deputy Director to show that the flows will not have a significant adverse impact on environmental resources.

Impact 10: Implementation of the PCRT agreement flow-shaping concept may result in unanticipated negative consequences that were not predicted by the habitat modeling

While this impact is not considered significant, Mitigation Measure 7 provides for a Biological Monitoring and Adaptive Management Plan for evaluating the effects of environmental measures on fish and wildlife, and adjusting measures if necessary.

VEGETATION AND WILDLIFE

Impact 11: Special status plants
Seven special status plants were identified along Project transmission line and access road rights of way and in the vicinity of recreational sites. These sites could be affected by the spread of noxious weeds or vegetation management activities, recreation related activities, or other ground disturbing activities. Noxious weeds have the potential to degrade native plant communities, out compete rare species, and reduce wildlife habitat values. Vegetation management could adversely impact natural resources, cultural values, recreation, aesthetics, and health and safety. This impact is considered significant.

Implementation of Mitigation Measure 9 will reduce this impact to less than significant.

Mitigation Measure 9: Vegetation and Noxious Weed Management Plan
PG&E shall develop within two years of license issuance, in consultation with the FS, Shasta County Agricultural Commissioner, CDFA, FWS, National Parks Service (NPS), CNPS, CDFG, and the Tribe and subject to approval by the Deputy Director prior to conducting any ground-disturbing activities, a vegetation and noxious weed management plan for all Project lands that provides for the following: (a) protection of special status plants that includes maintenance of a Project GIS database that would allow mapping and tracking occurrences of special status plants, including Pacific fuzzwort, in order to assist in evaluating plans for vegetation management, developing protocols for maintenance personnel that may be working in areas near known sensitive plant locations, siting for new recreational facilities, and other activities that would cause ground disturbance or habitat alteration; (b) improvement of wildlife habitat, including fire fuel load reduction measures (for any such measures, consult with the FS to evaluate the consistency with the FS standards and guidelines for management of the Chalk Mountain LSR, and protection of listed and sensitive species); (c) enhancement of ethnobotanical resources (identification of ethnobotanical resources, including the potential establishment and protection of plant gathering sites and the incorporation of important species into plans for revegetation); and (d) control of noxious weeds (including in the bypassed reaches), including the following:

A. Provisions for noxious weed surveys and management on all PG&E Project lands, including transmission line and access road rights-of-way and recreational facilities;
B. Identification of management responsibilities, goals, and objectives;

C. Definitions of realistic control intensities for each noxious weed that meets management objectives;
D. Comparisons and evaluations of resource trade-offs of various control methods;
E. Prioritization of treatment sites;
F. Presentation of an integrated noxious weed treatment scenario, including plans for long-term monitoring; and details of a plan for action, showing a schedule for implementation, funding requirements, and a mechanism for annual review and revision of the plan to incorporate information collected during monitoring efforts;
G. Proposed measures for revegetation following noxious weed treatments;
H. Emphasis on education and other pro-active measures (e.g., washing down construction equipment, certifying fill materials, public education and signing of public boat access points to prevent aquatic weed infestations) to prevent establishment and spread of weeds;
I. Emphasis on the use of non-herbicide techniques, and allow for herbicide use, if any, only at specific sites; for these sites, the plan should indicate why other techniques would not be effective and identify measures that would be taken to protect non-target plants and animals; and
J. Incorporation of noxious weed monitoring into other programs PG&E would be implementing, where possible, to maximize the potential for detection and early treatment.

Prepare a plan within one year of issuance of the recreation management plan in consultation with the FS and the Tribe that will address management of the overstory and understory at PG&E's existing and proposed developed recreational areas.

Impact 12: Loss of up to 50 acres of riparian vegetation
The proposed flows will improve riparian habitat by providing flows that will remove vegetation that has encroached into the active channel, while promoting the establishment of cottonwood on gravel bars, floodplains and terraces. Higher minimum instream flows could remove up to 50 acres of riparian vegetation. Most losses would occur in the torrent sedge series. Torrent sedge, willow, and alder would be likely to re-establish along the new high water mark in a relatively short period of time. Loss of riparian habitat could also reduce bank stability and increase the risk of establishment and spread of noxious weed populations on exposed soils. The higher minimum instream flow will have an overall positive effect on riparian habitat. Nonetheless, this impact is considered significant.

Implementation of Mitigation Measures 7 and 10 will reduce this impact to less than significant.

Mitigation Measure 10: Riparian Vegetation Monitoring Plan
In coordination with the Biological Monitoring and Adaptive Management Plan (Mitigation Measure 7), develop and implement a riparian vegetation monitoring plan for the three bypassed reaches to document changes over time and in response to any new instream flow requirements. The plan shall be developed within 1 year of license issuance in consultation with the FS, FWS, CDFG, and the Tribe to identify measurable

riparian habitat parameters, survey protocols and timing, and provisions for reporting, prior to submission to the Deputy Director for approval.

Impact 13: Impacts to Special Status Birds and Mammals
Construction of new recreational facilities, increased minimum flows, vegetation management measures, and whitewater flow releases may impact special status birds and mammals. Improvements to roads and existing facilities during the breeding season could disturb nesting birds, and cause long-term disturbance to bald eagles.

Implementation of Mitigation Measure 11 will reduce this impact to a less than significant level.

Mitigation Measure 11: Species Management and Monitoring Plan
PG&E shall consult with the FS, FWS, and CDFG prior to undertaking any actions that would affect FS sensitive species, including but not limited to the species listed below, or their habitat. The consultation shall determine whether preparation of a Biological Evaluation is necessary, identify best management practices that are consistent with the FS standards and guidelines, and develop additional specific protection measures that should be implemented. Results of the consultation shall be submitted to the FERC for approval.

A. Bats
   Develop methods to prevent bats from entering the stairway chamber at the Pit 5 Dam and the control room at the Pit 5 Gaging Station to minimize human/bat interactions. Implement measures, following consultation with a recognized bat expert, to exclude bats from the stairwell chamber at the Pit 5 Dam and the control room at the Pit 5 Gaging station and construct a bat-friendly gate at the Pit 4 Tunnel adit that would prevent public access while allowing bats to enter and exit. Provide for annual inspections of structures designed and installed to protect bats at the Pit 4 tunnel adit, and exclude bats at the Pit 5 Dam, and Pit 5 Gaging Station control room. Monitoring should be coordinated with full time Project patrol to ensure the structures are functional and properly maintained .

B. Bank Swallows
   Develop bank swallow monitoring protocols including the timing and frequency (maximum five-year intervals) of monitoring and provisions for reporting. Include in the protocols measures to coordinate bank swallow monitoring with the results of other Lake Britton erosion monitoring that will occur under the erosion and sedimentation control plan (Mitigation Measure 4) and the final Historic Properties Management Plan (Mitigation Measure 21). Monitoring will provide a basis to evaluate the potential effects of changes in reservoir operation on bank swallows. Develop the protocols within one year of license issuance in consultation with at a minimum the FS, FWS, and CDFG and State Water Board.

C. Neotropical Migrant Songbirds
Develop and implement plans to monitor neotropical migrant songbirds (using point count surveys to monitor breeding populations) that could be affected by changes in riparian habitat as a result of increased flows in the bypassed reaches and other changes to the Project (e.g., construction of modified or new recreational facilities), within one year of license issuance, in consultation with the FS, FWS, and CDFG, at a minimum. Surveys for neotropical migrants shall be conducted annually for five years following implementation of the new flow regime, and then at five-year intervals through any new license term to monitor changes over time.

D. Northern Goshawk
Conduct northern goshawk surveys, if it is determined that Project-related construction measures and vegetation management activities would affect potential nesting habitat. If nests are detected, consult with the FWS, CDFG, and FS regarding the need for implementing timing or spatial restrictions, or both, to protect them from disturbance.

E. Peregrine Falcon
Conduct annual surveys of known peregrine falcon nesting territories, and note any Project-related activities in the vicinity (within 0.25 miles) of the nest territories and any behavioral responses observed. Consult with the FS, FWS, and CDFG prior to initiation of the annual surveys to determine if adjustments to the timing of the proposed peregrine falcon surveys and the survey protocol to match the guidelines of the federal monitoring plan are warranted.

F. Foothill Yellow-Legged Frog
Develop a foothill yellow-legged frog monitoring plan within one year of license issuance, in consultation with the State Water Board, FS, CDFG, and FWS, at a minimum, that includes provisions for conducting a four-year study (at a minimum) of breeding site characteristics that includes the following:

1) Surveys of foothill yellow-legged frog distribution in the Pit 4 Reach throughout the spring and summer to determine presence and life stage development as well as distribution and presence in the Pit 3 and Pit 5 Reach (latter to be coordinated with baseline data collection for the recreation streamflow release plan, Mitigation Measure 16);

2) A more thorough search than the spring and summer surveys during the spring breeding season to identify population centers and breeding sites and count numbers of clutches found;

3) Descriptions of the physical features of all identified frog breeding sites, including substrate, water temperature at the onset of egg deposition, vegetative cover, water velocities at egg deposition sites, canopy categories, patch size channel habitat type, and evidence of predation;

4) Determination of whether changes in flows result in breeding in newly inundated margins, or use of old sites that are now deeper;

5) Assessments of whether the new breeding sites connect with the summer lower flow channel, remain as disconnected off channel water bodies, or dry up entirely;

6) Return visits to breeding sites and adjacent low flow areas that may be tadpole rearing habitat to assess survival of tadpoles to metamorphosis;

7) Estimates of the number of adults at the onset of breeding at each breeding site;

8) Monitoring of the time from egg deposition to hatching;

9) Monitoring of tadpole numbers and life stage development;

10) Monitoring of water temperatures annually in March through May to determine the temperature at which breeding initiates and terminates in coordination with the Water Temperature Monitoring Plan (Mitigation Measure 2);

11) An assessment of whether the high tadpole mortality observed in 2002 was due to a water quality factor or predation;

12) Taking advantage of unplanned spring or summer high flow events, to the extent possible, to determine any correlation between these spill events and changes in tadpole or metamorph numbers from years when these events did not occur;

13) Taking advantage of the receding spring hydrograph to determine flow vectors at known breeding sites and their changes with flows; and

14) Reporting procedures for survey and monitoring results.

G. Western Pond Turtle

Within 1 year of license issuance develop a monitoring plan for western pond turtle in consultation with, at a minimum, the State Water Board, FS, FWS, and CDFG. The plan shall consider monitoring at sites where turtles were observed during pre-licensing studies (Spring Rivers, 2001b), e.g., near Camp Nine Flat, Malinda Gulch, Canyon Creek, Blackberry Creek, Big Bend Hot Springs, and the two sites just downstream of the hot springs.

H. Valley Elderberry Longhorn Beetle

Develop and implement a plan in consultation with the DFG, FS, and FWS for the protection of valley elderberry longhorn beetle (VELB), including pre-construction

surveys, where needed, and training and education for crews that are responsible for management (operation and maintenance) of the Project. Include in the plan provisions for ensuring that measures identified in the plan (e.g., flagging and protecting elderberry shrubs with stems over one inch in diameter) are consistent with the current FWS guidelines.

I. Northern Spotted Owl

Consult with the FS, FWS, and CDFG in the development of mapping of suitable habitat for northern spotted owl that could be affected by Project operations. Identify during this consultation, the process that would be used to determine if field surveys or protection measures might be required. PG&E's survey responsibilities in general should be confined to areas within 0.25 miles of Project activity sites (or an alternative buffer determined during agency consultation) where potential disturbance of owls is a concern, unless specific activities (e.g., those that may generate noise beyond the designated buffer) that would require adjustment of this survey limit are identified during agency consultation. File a plan with FERC within one year of license issuance that identifies the area to be mapped and subject to potential survey, the process that would be used to determine when field surveys and assessment of potential protective measures would be needed, and a schedule for submitting maps of suitable northern spotted owl habitat within the defined study area to FERC.

J. Bald Eagle

Prepare a revised Interagency Bald Eagle Management Plan (IBEMP) and update every five years. Include local communities, commercial operators (e.g., angling guides, outfitters, rafting companies), and recreational groups in the consultation process for the proposed IBEMP update, since measures to protect bald eagles would affect their activities and businesses and would require their cooperation. Include the Tribe in the consultation process, due to the cultural importance of the bald eagle. Include a mechanism for regular meetings with plan cooperators to identify any changes to the plan that may be needed. The IBEMP should focus on:

1) Protection of habitat to ensure that suitable nest, roost, and perch trees (and stands) would be available through the license period; and

2) Identification of specific measures that would effectively minimize disturbance to both nesting and wintering bald eagles (existing measures such as boating speed restrictions in upper Lake Britton, would likely need to be continued); additional measures may also be needed to respond to changes in bald eagle nest locations; implementation of scheduled whitewater releases could disturb bald eagles and would need to be carefully managed in order to minimize the risk of adverse effects. Update the 1993 Biological Compliance Monitoring Plan (BCMP), implement the monitoring specified in the updated Interagency IBEMP, and prepare a comprehensive report at five-year intervals. The updated IBEMP should include annual bald eagle breeding, productivity, and

wintering surveys and maintain mapped information on nesting, roosting, and perch trees and foraging areas to monitor how these locations relate to proposed recreational facility construction or changes in recreational use patterns. The updated BCMP shall include fish monitoring. The plan should also include provisions to reduce the frequency, or discontinue elements, of the monitoring program if they are no longer necessary to protect bald eagle populations in the Project area.

K. Terrestrial mollusks
Surveys for terrestrial mollusks shall occur prior to construction or modification of Project-related facilities that may influence potential habitat. Survey results shall be submitted to the FS, CDFG, and FWS and the survey results should be used to determine appropriate protective measures, if any.

Impact 14: Project impacts on Valley Elderberry Longhorn Beetle
Valley Elderberry Longhorn Beetle (VELB) was listed on the Endangered Species Act as threatened in 1980. Habitat for the VELB in the Project area is extremely limited, and occurrences of this species are unlikely. Maintenance, construction, or other ground-disturbing activities may impact elderberry shrubs in the Project area not previously surveyed. This impact is considered significant.

Implementation of Mitigation Measure 11 will reduce this impact to a less than significant level.

Impact 15: Noise impacts on nesting owls and other species
Noise from road improvements and improvements at recreation sites (heavy equipment operation for grading, excavating, loading, hauling, culvert installation, or bridge construction) could disturb nesting owls and other species if conducted within the proximity of nests during the breeding season. This impact is considered significant.

Implementation of Mitigation Measure 11will reduce this impact to a less than significant level.

RECREATION

Impact 16: Impacts from increased recreational use
Increased recreational use may exacerbate existing sanitation problems in the area surrounding Lake Britton and other recreation sites. Increased recreation may also increase safety problems, road impacts, and increase off-road vehicle (ORV) effects on resources, including the demand for parking. Regular monitoring of the Project area would act as a deterrent to minimize vandalism, cultural resource disturbance, and trash dumping. This impact is considered significant.

Implementation of Mitigation Measures 12, 13, and 14 will reduce this impact to a less than significant level.

Mitigation Measure 12: Recreation Management Plan
PG&E shall develop a comprehensive Recreation Management Plan that includes site drawings and an implementation schedule. The FS, FWS, NPS, California Department of Parks and Recreation (CDPR), CDFG, State Water Board, Shasta County, the Tribe, and the Hat Creek Technical Advisory Committee, shall be consulted during development of PG&E's proposed recreation management plan. The Plan shall be submitted to the Deputy Director for approval within one year of license issuance. The plan shall include the following components and considerations:

A. Identification of recreational use management objectives for the Project area, specifically for the upper and lower Lake Britton area and the Pit River Canyon Reaches, and consideration of FS Recreation Opportunity Spectrum (ROS) objectives associated with these areas, as appropriate, in developing these objectives.

B. A summary of the existing Project-related facilities, including type, location, owner, and entity responsible for the management of the facilities.

C. Recreational-use capacity triggers to help assess the need for future development of additional facilities, such as an expanded campground or day-use facility at Lake Britton, or a new primitive campground in the Pit River Canyon area.

D. The results of PG&E's proposed assessment of whether a primitive campground can be developed along the Pit 5 Bypassed Reach, including: (a) potential sites; (b) the estimated cost of developing a site; (c) documentation of consultation with CDPR, FWS, CDFG, and representatives of the community of Big Bend; (d) a recommendation regarding whether the site should be developed; and (e), if so, a schedule or capacity trigger that would be used to initiate site development.

E. Measures to provide new and upgraded existing Project-related recreational facilities and trails within the Project area, including triggers to address the need for sanitation facilities and trash receptacles. The plan shall include preliminary designs, implementation schedule, and estimated costs for these facilities. Facility design should consider providing accessibility to persons with disabilities, as appropriate, and be consistent with the recreational-use management objectives.

F. Assessment of the potential effects of the proposed facilities on the Project area sensitive resources, and development of additional appropriate site-specific mitigation measures, if needed.

G. Coordination of the development of the plan and facility upgrades with development with the road and facilities management plan, particularly the off-road vehicle (ORV) management component of that plan, the vegetation

management plan, the IBEMP, and the Historic Properties Management Plan (Mitigation Measure 20) for the Project.

H. Identification of measures to maintain and manage the existing and new Project-related recreational facilities and trails within the Project area, including identifying the entity responsible for managing the facility, and recreational site vegetation management measures for the existing and proposed recreational access areas within the Project boundary.

I. Documentation of consultation conducted in the development of the recreation management plan with agencies, tribes, and other interested parties, including copies of any correspondence with the consulted parties, summary of key meetings conducted with the consulted parties in the development of the plan, and PG&E's response to comments on the plan.

J. The following measures that pertain to Lake Britton:

1) Develop a plan for public access to Lower Hat Creek consistent with the Historic Properties Management Plan.
2) Implementation of the following improvements at the North Shore Campground: (a) institute measures to create and maintain beach areas and to reduce shoreline erosion due to beach use; (b) designate swimming areas to separate swimming and boat mooring and beaching; (c) provide directional signage, as appropriate; (d) evaluate the need for and feasibility of constructing additional road pullouts on the North Shore Campground access road; assess measures to provide 10 to 15 parking spaces for day use only near the boat launch or east bluff beach access areas; (e) provide firewood to campground users (either for sale or free of charge); and (f) install flush toilets and showers;
3) Identification of additional beach day-use capacity around Lake Britton that would increase the existing capacity by 100 people at one time and concentrate on enhancing existing sites or disturbed areas before any new locations are considered. Day use areas would include the following: (a) regularly maintained beach sand, if needed; (b) access to the shore designed to minimize erosion; (c) restrooms on site or nearby; (d) access by road or boat; (e) designated parking, if access is by road; (f) trash collection; and (g) regular monitoring by a host or PG&E employee;
4) Addition of 25 percent more public overnight developed camping units over the life of the license (an increase of 39 sites); at least half of the capacity would be added during the first 10 years from license issuance and the balance within 15 years of license issuance; additions to capacity should be within the Project boundary or situated to enhance public access to Project lands and waters; new capacity would emphasize expansion of existing sites and use areas over the development of new sites and use areas;
5) Establishment of a reservoir water surface zoning plan that documents existing speed zones and displays recommended changes; and

6) Identification of measures to enhance the existing Jamo Point boat launch area, including: (a) designating parking spaces for vehicles with trailers; (b) providing a picnic table between the restroom and shoreline; (c) developing a potable water source at the Jamo Point boat launch or Pines picnic area, including an assessment of whether this source should be available on a year-round basis, to help improve the recreational user experience at this area; and (d) providing personnel at the Jamo Point boat launch area and Pines picnic area to provide trash removal and maintenance of restrooms during weekends from Labor Day through the end of September.

K. Include in the recreation management plan the following measures that pertain to the Pit River Canyon:

1) If the Shasta County ordinance prohibiting boating on the Pit 4 Reservoir is modified to allow public use by non-gasoline powered boats, address the most appropriate location for this access;

2) Provide a day-use access area at the Pit 5 or Tunnel Reservoirs;

3) Improve and provide adequate parking at Talus Siren by removing road debris piles on the south side of the road. Implement the following trail improvements to enhance access to the bypassed reaches at Powder Spur, Delucci Ridge, Rock Creek, Malinda Gulch, and Oak Flat in a manner that is consistent with the FS ROS objectives for this area, Roaded Natural and Semi-Primitive Motorized: (a) erosion and sedimentation control measures; (b) stabilization of existing erosion sites; (c) provide signage to designate trails; (d) improve and provide adequate parking at each trailhead; (e) provide trailhead trash receptacles, as appropriate; and (f) provide sanitation facilities, as appropriate;

4) Develop spoil pile 4D, near the Pit 4 Dam, into a scenic canyon overlook vista and include in the design: (a) parking areas; (b) pathways; (c) interpretive signage, and (d) safety barriers at the edge of the steep slope, as needed; coordinate the design with the spoil pile management plan;

5) Address the following issues that pertain to dispersed use along the Project bypassed reaches: (a) fire prevention; (b) sanitation; (c) parking; (d) unintended expansion of the area influenced by recreational use (site creep); (e) crowding; and (f) length of stay limits;

6) Provide recreation-related improvements at Ruling Creek to include: (a) a vault toilet; (b) trash receptacles; (c) provisions to either remove or incorporate into the site design the piles of road debris; (d) realignment of the access road away from the river; (e) stabilization of riverbank erosion associated with the old roadbed; (f) designated camping and parking

locations; (g) installation of metal fire rings; and (h) improvements of pedestrian access to the river; and

7) Provide whitewater boater put in and take out sites at each of the three bypassed reaches, including: (a) on the Pit 3 Reach, improve egress from the river in the vicinity of the powerhouse; (b) on the Pit 4 Reach, improve egress from the river in the vicinity of the existing informal take-out at the Pit 4 Powerhouse, grade the parking lot, and provide a vault toilet; and (c) on the Pit 5 Reach, improve ingress to the river by improving access and providing additional parking in the vicinity of the existing informal put-in near Trailer Road, and at the take-out in the vicinity of the existing informal access just upstream of the Pit 5 Powerhouse, grade and gravel the parking area and provide a vault toilet.

Mitigation Measure 13: Road and Facilities Management Plan
PG&E shall develop a road and facilities management plan within one year of license issuance, in consultation with the FS, FWS, the Tribe, the Hat Creek TAC, and State Water Board. The plan shall be submitted to the FERC for approval and shall include the following:

A. An inventory and map of existing road segments and parking areas within the Project boundary, both FS classified and unclassified, including: (1) the purpose of each road and parking area, relative to Project purposes; (2) season of operation; (3) designated FS road management objectives (RMO) (if applicable); (4) drainage crossings or bridges and culverts and verification of ability to pass water and debris during a 100-year storm event; (5) location of road watering sources; and (6) disposal sites for surplus material such as rocks, brush, and spoil piles; this inventory would serve to identify those roads that serve Project purposes and are the responsibility of PG&E to be maintained in a manner consistent with current criteria and consistent with the FS RMOs; of the roads listed in table 46 of the EIS, unless evidence to the contrary is presented, the following roads do not have a nexus to the Project and are not considered Project roads: bald eagle management area road; Pit 4 Reservoir Spurs; Big Pine Deer Camp Road; Deep Creek Campground Road; and Gravel Bar Road, and do not recommend that these roads be considered Project roads, unless evidence to the contrary is presented.
B. Provisions to restrict vehicular access to designated roadways and prohibit off road activities within the Project area including: (1) grading and adding red cinder to limit rutting and muddiness; (2) revegetating and bouldering Offroad Recreational Vehicle (ORV) created roads; (3) consultation to determine which roads should be closed; and (4) development of an ORV management plan to protect sensitive cultural and terrestrial resources that includes: (a) identification of damaged areas; (b) identification of rehabilitation needs for damaged areas; (c) time frames for seasonal road closures; (d) restrictions to protect bald eagles, cultural resources, and sensitive habitats; and (e) measures to address access roads near the Hat Creek fish barrier dam to assess the need for vehicular

access roads and ways to balance access with protection of sensitive areas. Development of the ORV management plan would be coordinated with the implementation of the Historic Properties Management Plan;

C. Provisions to consult with the FS, the Tribe, and California Department of Transportation (CalTrans), to develop road maintenance standards and specific road rehabilitation needs;
D. Provisions to consult with the FS, CalTrans, and Shasta County to develop interim measures to address the current condition of the intersection of Jamo Point/Pines picnic area access road with State Route 89;
E. Establishment of designated areas for disposal of rock and soil from road management and a description of the types of materials allowed to be disposed of in the designated areas and how organic materials would be treated;
F. A road rehabilitation schedule to bring existing Project-related roads and associated facilities (i.e., culverts, gates, bridges, crossings, cribwalls) into compliance with applicable standards that achieve the FS designated RMOs (for roads on National Forest System Lands);
G. Specification of applicable limited operating periods for road rehabilitation and maintenance that would protect sensitive species of wildlife;
H. Measures to address existing road and parking area rehabilitation needs to bring existing Project roads up to current public safety levels; general road rehabilitation needs would include items such as: (1) gates and signage for road closures as specified in the latest edition of the *Manual of Uniform Traffic Control Devices*; (2) measures to prevent introduction of noxious weeds at construction sites; (3) implementation of the FS's *Best Management Practices - Water Quality Management for Forest System Lands in California*; (4) bridge inspections; (5) installation of vehicle control measures to protect against erosion; and (6) regular maintenance of roadways including replacing faded signs, clearing vegetation to provide adequate sight distances, and repairing or replacing damaged culverts. Specific rehabilitation needs should include upgrades developed in consultation with the above entities;
I. Where dust from Project roads has been identified as a problem (e.g., Hagan Flat Road from Tunnel Reservoir to the Pit 5 Dam), address dust control measures that are proposed for implementation;
J. Measures to monitor future use and condition of the Project area road segments and parking areas, including traffic-use surveys every six years at designated sites, time frames, and frequencies; and conduct future Project-related road and parking area rehabilitation, as necessary, based on the results of this monitoring, in consultation with the FS, FWS, the Tribe, the Hat Creek TAC, and State Water Board;
K. Measures to monitor and address landslide and soil erosion activity related to Project roads and parking areas;
L. A water quality monitoring plan that includes runoff management;
M. A traffic safety plan;
N. An adaptive management component to allow changes to the plan should use or applicable standards necessitate;

O. Provisions to submit a summary report to FERC every six years to include the road survey results, documentation of consultation, and a summary of planned road segment and parking area rehabilitation measures, including schedule, party responsible for funding and implementing the measures, and estimated costs for implementation;
P. An implementation schedule and estimated costs for road rehabilitation and ORV management measures that would be conducted during the period that precedes the submittal of the first summary report specified in the above measure; and
Q. Documentation of consultation conducted in the development of the road management and maintenance plan, including copies of any correspondence with the consulted parties and licensee's response to comments on the plan.

Develop a plan, in consultation with the FS and the Tribe, and submitted to the FERC for approval within one year of license issuance, for providing full time patrol of the Project for purposes of resource protection that provides for routine and regular physical inspections of affected lands, Project facilities, and structures including implemented protection, mitigation, and enhancement measures and the provisions of the Historic Properties Management Plan. The plan shall also include a description of reporting responsibilities, including observed violations of laws, and communications with law enforcement agencies as well as required documentation of inspections.

Mitigation Measure 14: Signage Plan
PG&E shall develop a signage plan in consultation with the FS, California Department of Parks and Recreation (CDPR), and CalTrans, at a minimum, within one year of license issuance that specifies the location, design, size, color, and message for the following types of signs: (a) information and education; (b) fire prevention; (c) regulatory and warning; (d) Project license; (e) road; (f) recreation; (g) directional; and (h) safety. The plan should address maintenance standards, so that all signs are maintained in a neat and presentable condition, and provisions to ensure sign format is consistent throughout the Project area. The plan shall be submitted to the FERC for approval.

Impact 17: Impacts of recreation flow releases
Recreational flow releases in August and September may increase fire risk, create a need to train local fire department personnel in whitewater rescue techniques, increase the amount of litter, and affect sensitive cultural resources. This impact is considered significant.

Implementation of Mitigation Measures 8, 15, and 16 will reduce this impact to less than significant.

Mitigation Measure 15: Interpretive and Education Plan
PG&E shall develop an Interpretive and Education (I&E) Plan for Lake Britton and the Pit River Canyon area in consultation with the FS, CDPR, NPS, FWS, CDFG, and the Tribe, and submit the plan to FERC within two years of license issuance; include in the plan the following components:

A. Information to be publicized about the Pit River Hydroelectric System; Native American history; local history; Project area aquatic, botanical, and wildlife resources;
B. Resource management actions planned and under way;
C. Appropriate recreation behavior and resource protection (leave-no-trace practices, fire safety, vandalism awareness, and recreation use impacts);
D. Maps (indicating roads, parking areas, developments, and trails);
E. Public safety information, such as safe boating and angling practices on Project waters;
F. Specific measures that would be used to provide interpretive materials (e.g., brochures and location of signage, as appropriate) to educate the public about the above topics; and
G. Documentation of consultation conducted in the development of the I&E plan, including copies of any correspondence with the consulted parties, summary of key meetings conducted with the consulted parties in the development of the plan, and PG&E's response to comments on the plan.

Mitigation Measure 16: Fire Management and Response Plan
PG&E shall develop a fire management and response plan for Project lands within six months of license issuance in consultation with the California Department of Forestry and Fire Protection, local fire departments, such as Burney and Big Bend, and the FS that is consistent with existing fire management strategies on lands within and adjacent to the Project boundary. The plan shall be submitted to the FERC for approval. The fire management and response plan shall include the following: (a) how fire danger and public safety associated with Project induced recreation, including fire danger associated with dispersed camping, existing and proposed developed recreation sites, trails, and vehicular access would be addressed; (b) measures to increase public awareness about fire danger, including signs and brochures; (c) an analysis of fire prevention needs including equipment and personnel availability and fire patrols; (d) a list of the location of available fire prevention equipment and the location and availability of fire prevention personnel; (e) provisions for reporting any Project related fires to the FS as soon as practicable; (f) how fire control and extinguishing would be addressed; and (g) how PG&E would ensure that fire prevention measures would meet water quality best management practices. The fire management and response plan would be coordinated with the recommended vegetation management plan, including measures for vegetation management to control the potential fuel supply for fires, and the I&E plan.

LAND USE AND AESTHETICS

Impact 18: Fire risk from increased recreational use
Increased recreational use at developed and dispersed recreational areas with user-created fire rings adds to the threat of fires. Additional fires could result in property damage, destruction of the scenic beauty of the Pit River Canyon, increase particulate matter and decrease air quality due to smoke. This impact is considered significant.

Implementation of Mitigation Measures 14, 15, 16, 17, and 21 will reduce this impact to a less than significant level.

Mitigation Measure 17: Recreation Monitoring Plan
PG&E shall develop a recreation monitoring component to the Recreation Management Plan to assess levels of recreation use, need for additional resource protection measures, and need for facility expansion. The monitoring component shall include the following:

A. A definition of recreation monitoring indicators, such as recreational facility occupancy rates, dispersed site occupancy rates, perceived crowding, reservoir boating use levels, river shoreline use densities, number and area of user created dispersed areas, litter and debris, recreational facility condition, vandalism, and effects on cultural resources, bald eagle, aquatic habitat, and water quality;
B. Standards that would help define the minimum acceptable condition for each indicator;
C. Identification of the frequency the indicators would be monitored and provisions for stakeholders to meet to discuss monitoring results;
D. Identification of measures that will be used, based on the results of monitoring, to determine if recreational use should be limited due to effects on resources or if recreational use should be allowed to grow and additional facilities constructed to accommodate growth in recreational use; these measures should coincide with the recreational use capacity triggers to help assess the need for future development of additional facilities;
E. Identification of measures to provide recreational use data for the year prior to the submittal of the summary report (i.e., every six years) by activity and by facility location and information related to boating use with a description of the methodology used to collect the data;
F. The process for identification of unforeseen management factors or issues, based on the results of the monitoring, that were not addressed in the original recreation management plan, and measures to address these issues;
G. Submittal of a summary report to FERC every six years (coinciding with the FERC Form 80 submittal) to include the recreation monitoring results, documentation of consultation, and a summary of any planned recreational facility improvement measures or resources protection mitigation measures associated with the recreational facilities, including schedule, party responsible for funding and implementing the measures, estimated costs for implementation, and entity responsible for the long-term maintenance and management of the planned recreational facilities or mitigation measures; and
H. Documentation of consultation conducted in the development of the recreation-monitoring plan, including copies of any correspondence with the consulted parties, summary of key meetings conducted with the consulted parties in the development of the plan, and licensee's response to comments on the plan.

Mitigation Measure 21: Project Patrol
PG&E shall develop a plan, in consultation with the FS and Tribe, within one year of license issuance, for providing full time patrol of the Project for purposes of resource protection that provided for routine and regular physical inspection of affected lands, Project facilities, and structures including implemented protection, mitigation, and enhancement measures and the provisions of the Historic Properties Management Plan. The plan shall also include a description of reporting responsibilities, including observed violations of the laws, and communications with law enforcement agencies as well as required documentation of inspections. The plan shall be submitted to the FERC for approval.

Impact 19: Proposed recreational enhancements may affect the aesthetics of the Project area
During construction of new facilities, earth-disturbing activities and equipment operations could have short-term adverse effects on the scenic value of the area. Vegetation removal to accommodate new facilities may result in temporary or long-term change of the visual character of the immediate surroundings. This impact is considered significant.

Implementation of Mitigation Measure 18 will reduce this impact to a less than significant level.

Mitigation Measure 18: Visual Management Plan
PG&E shall develop a visual management plan (VMP) in consultation with the FS and CDPR within one year of license issuance that would: (a) specify practical methods that would be implemented to reduce visual effects of existing facilities during regular maintenance and upgrading; (b) specify practical methods that would be implemented to minimize visual effects of proposed and recommended new facilities (including use of surface treatments with colors and materials that are in harmony with the surrounding landscape, use of native plant species to screen facilities from view, and the rescape and revegetation of disturbed areas to blend with surrounding scenic characteristics); and (c) specify practical methods that would be implemented for removal of Project-related debris from Project-influenced waters. The plan shall be submitted to the FERC for approval.

CULTURAL RESOURCES

Impact 20: Impacts on cultural resources
Effects on cultural resources can result from use and maintenance of roads, wind and water erosion, recreation, vandalism, and modifications and repairs to Project facilities. Effects may be attributable to Project operations, or to Project related recreational or other enhancements. They may also be attributable to natural and human forces unrelated to the existence or operation of the Project. This impact is considered significant.

Implementation of Mitigation Measures 14, 19, 20, and 21 will reduce this impact to less than significant.

Mitigation Measure 19: Land and Habitat Management Plan
PG&E shall develop a land and habitat management plan (LHMP) for Project lands, that includes previously described plans to facilitate cross-referencing the many inter-related component plans and help ensure that management of Project resources is coordinated throughout the term of the license. The LHMP would be filed for FERC approval within two years of license issuance. The LHMP would include the following:

A. Overview and discussion of general land management measures within the Project area (this section would include a discussion of key land management objectives, and a description of how coordination of the various components of the LHMP would be accomplished)
B. Erosion and sedimentation control plan (Mitigation Measure 4)
C. Spoil pile management plan (Mitigation Measure 5)
D. Biological monitoring and adaptive management plan (Mitigation Measure 7) that includes the following components: the fish and invertebrate monitoring plan; foothill yellow-legged frog monitoring plan; western pond turtle monitoring plan; IBEMP; Biological Compliance Monitoring Plan; wildlife management plan (which specifies monitoring and mitigation to protect sensitive wildlife species proposed and recommended elsewhere); and vegetation and noxious weed management plan (Mitigation Measure 9)
E. Historic Properties Management Plan (portions that do not include sensitive materials) (Mitigation Measure 20)
F. Recreation management plan (Mitigation Measure 12)
G. Project patrol plan (Mitigation Measure 21)
H. Road and facilities management plan (Mitigation Measure 13)
I. Sign plan (Mitigation Measure 14)
J. Fire management and response plan (Mitigation Measure 16)
K. Visual Management Plan (Mitigation Measure 18)

Each chapter shall consist of the specified plan, with cross-references to related plans to avoid redundancy, as appropriate, and would include a description of the proposed management and enhancement measures, an implementation schedule, monitoring and maintenance measures, and documentation of consultation conducted in the development of the plan.

Mitigation Measure 20: Historic Properties Management Plan (or Cultural Resources Management Plan)
PG&E shall prepare and implement a Historic Properties Management Plan in consultation with the Tribes, State Historic Preservation Officer (SHPO), and FS, within one year of license issuance that will resolve any adverse effects on cultural resources. The plan shall be submitted to the FERC for approval. The Historic Properties Management Plan shall provide measures to mitigate any identified impacts, including a monitoring program, a patrolling program, and management protocols for the on-going

protection of archaeological properties. If items of potential cultural, historical, archaeological, or paleontological value are discovered, PG&E shall immediately cease work in the area affected. PG&E shall then, in consultation with the SHPO and FS, prepare a site-specific plan for the affected area for approval by FERC, and implement the steps identified in the plan to protect the site from impact. The Historic Properties Management Plan shall include provisions identified in the ongoing supplemental ethnographic studies that pertain to identification of ethnobotanical resources, including the potential establishment and protection of plant gathering sites and the incorporation of important species into plans for revegetation. Shoreline stabilization procedures are addressed in Mitigation Measure 4.